Environmental Assessment Checklist

Project Name: Butte Silver Bow Herman Gulch Water Treatment Plant Easement
Proposed Implementation Date: April - 2014
Proponent: Butte Silver Bow, Public Works Department
County: Butte Silver Bow

Type and Purpose of Action

Description of Proposed Action:
The Butte/Silver Bow consolidated government is proposing acquire a permanent easement, covering 3.72 ac. of land, from the State of Montana to locate a portion of the Basin Creek Water Treatment facility. The project is located in a portion of the NW1/4NE1/4 Sec. 36 T2N R8W (refer to attached vicinity and easement maps.)

Beneficiary	Legal Description	Total Acres	Treated Acres
Common Schools- K-12 Education	**NW1/4NE1/4 Sec. 36 T2N R8W**	**40**	**3.72**
University of Montana			
Montana State University – Morrill Grant			
Montana State University – Second Grant			
Montana Tech-Butte			
University of Montana-Western			
Montana State University-Billings			
State Reform School-Pine Hills			
State Normal School			
Montana School for the Deaf and Blind			
Montana Veterans Home			
Public Buildings			

Objectives of the project include:

- Butte-Silver Bow (BSB) municipal government has requested a permanent easement for lands to support a new water treatment facility. The new plant is part of a major upgrade for that portion of the municipal water system provided by the Basin Creek Reservoir. State trust lands would be used for pressurizing infrastructure and to stabilize the site location.

Proposed activities include:

- Installation of construction cut-slopes and pressure relief tubes

The lands involved in this proposed project are held in trust by the State of Montana. (Enabling Act of February 22, 1889; 1972 Montana Constitution, Article X, Section 11.) The Board of Land Commissioners and the DNRC are required by law to administer these trust lands to produce the largest measure of reasonable and legitimate return over the long run for the beneficiary institutions (Section 77-1-202, MCA).

The DNRC would manage lands involved in this project in accordance with:

- Administrative Rules for Forest Management (ARM 36.11.401 through 471)

and all other applicable state and federal laws.

Project Development

SCOPING:

- DATE:
  - Public scoping was open from 1-31-13 to 2-21-14
- PUBLIC SCOPED:
  - The scoping notice was posted on the DNRC Website: http://dnrc.mt.gov/PublicInterest/Notices/Default.asp
- Sent to 34 adjacent landowners, DNRC's statewide scoping list and other interested parties.
- AGENCIES SCOPED:
  - Montana Fish, Wildlife & Parks (FWP)
  - Montana Attorney General's Office
  - Office of Securities & Insurance
  - Office of the State Superintendent of Public Instruction
  - Office of Secretary of State for Montana
  - Beaverhead Deer Lodge National Forest
- COMMENTS RECEIVED:
  - How many: Three
  - Concerns:
    - Concern was expressed about blockage of the Herman Gulch Road preventing access to homes and egress for work and emergencies.
    - Implementation of the action alternative may impair the movement of elk through their historic migration corridor.
    - The proposed action could negatively impact critical winter forage for the local elk population
    - Ground disturbance on the Trust Land could impact cultural resources which might be present
    - Ground disturbance, especially on steeper slopes can lead to soil erosion causing negative impacts to this resource.
    - The proposed action may introduce new state-listed noxious weeds to the site or spread existing populations

- Results (how were concerns addressed):
  - Access to the power plant is planned from the Basin Creek Road. There will be excavation work on the Trust Land but road access from Herman Gulch has not been proposed. Prevention of equipment blockage on the 126.28 ft. of road frontage involved on Trust Land can be dealt with by inserting a clause in the construction authorization which prohibits road blockage. It also needs to be pointed out that there are no authorizations issued by the State for anyone to use the Herman Gulch Road where it crosses School Trust Lands.
  - Elk movement corridors and winter forage-***See Wildlife comment section***
  - Cultural Resources-***See Historical or Archaeological sites comments and mitigations.***
  - Ground Disturbance and soil erosion-***See Geology & Soil Quality and Moisture Mitigations***
  - Noxious weed introduction and spread-***See vegetation Mitigations***

Internal and external issues and concerns were considered during project planning and design.

DNRC specialists were consulted, including: DNRC Wildlife Biologist, Archeologist and Soil Scientist/Hydrologist.

Internal and external issues and concerns were incorporated into project planning and design and will be implemented in associated contracts.

OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED: (Conservation Easements, Army Corp of Engineers, road use permits, etc.)

Activity on DNRC lands will comply with all applicable local, state and federal laws.

ALTERNATIVES CONSIDERED:

No-Action:

Action Alternative (Provide a brief description of all proposed activities):

The proposed action involves cutting back-slopes to stabilize excavations made for the water treatment plant and the installation of pipes to aid in pressure management within the plant.

Impacts on the Physical Environment

Evaluation of the impacts on the proposed action including **primary, secondary and cumulative** impacts on the Physical Environment.

Vegetation	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Noxious Weeds			X		Yes	See vegetation mitigations
Rare Plants	X					Natural Heritage Program lists none
Vegetative community			X		Yes	Minor throughout the 40. High on disturbed sites
Old Growth	X					

Vegetation Mitigations:

- Stockpiling and redressing the top four inches of soil back onto disturbed areas
- Seed all disturbed ground to specified weed free grass seed mixture
- Eradicate State listed noxious weeds which occur within the easement boundary
- The applicant is responsible for the control and eradication of all state listed noxious weeds which occur within the easement boundary. Failure to eradicate these weeds will be grounds for easement termination.

Geology & Soil Quality and Moisture	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Nutrient Cycling			X		Yes	By establishing a grass stand on the site
Soil Productivity				X	Revegetation will help to some extent	The amount of acres on which soil productivity will be impacted is relatively small compared to the entire 40 ac. tract
Slope Stability			X		Yes	By keeping the cut slopes to 1:1 and fill slopes to 1.5:1
Erosion			X		Yes	By installing water bars where needed and revegetating disturbed sites.
Compaction		X			Yes	Restrict operations to periods when the soil moisture content is less than 20%

Soil Mitigations:

- Stockpile top 4 inches of soil for reapplication after construction
- After the slopes have been redressed with the stockpiled soil the following grass seed mixture will be applied:
  - Sheep Fescue 4# PLS/ac.
  - Western Wheatgrass 6# PLS/ac.
  - Pubescent Wheatgrass 6# PLS/ac.
  - Canada Bluegrass 4# PLS/ac.
- All grass seed will be certified weed free
- Continue applications until vegetation acceptable to the DNRC Anaconda Unit Manager is established
- Cut slopes are not to exceed 1:1 and fill slopes 11/2:1
- Install water bars where identified by DNRC's representative

- Operations will not occur when soil moisture content is greater than 20%

Water Quality, Quantity and Distribution	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Sediment Delivery	X					
Water Yield	X					

Comments: No water on that portion of the tract involved with this project.

Fisheries	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Sediment	X					
Flow Regimes	X					
Woody Debris	X					
Stream Shading	X					
Stream Temperature	X					
Connectivity	X					
Populations	X					

Comments: No waterways involved with this project

Wildlife	IMPACT				Can Impact be mitigated?	Comment Index
Threatened and Endangered Species	N/A	Negligible	Minor	High		
Grizzly bear *(Ursus arctos)* Habitat: Recovery areas, security from human activity	X					
Canada lynx *(Felix lynx)* Habitat: Subalpine fir habitat types, dense sapling, old forest, deep snow zone	X					
Bull Trout (*Salvelinus confluentus*) Habitat: clean cold water, streams, rivers, lakes	X					
Sensitive Species						
Bald eagle *(Haliaeetus leucocephalus)* Habitat: Late-successional forest more than 1 mile from open water	X					Closest eagle nest 20 miles.
Black-backed woodpecker *(Picoides arcticus)* Habitat: Mature to old	X					

burned or beetle-infested forest						
Coeur d'Alene salamander *(Plethodon idahoensis)* Habitat: Waterfall spray zones, talus near cascading streams	X					
Columbian sharp-tailed grouse *(Tympanuchus Phasianellus columbianus)* Habitat: Grassland, shrubland, riparian, agriculture	X					
Common loon *(Gavia immer)* Habitat: Cold mountain lakes, nest in emergent vegetation	X					
Fisher *(Martes pennanti)* Habitat: Dense mature to old forest less than 6,000 feet in elevation and riparian	X					
Flammulated owl *(Otus flammeolus)* Habitat: Late-successional ponderosa pine and Douglas-fir forest	X					
Gray Wolf *(Canis lupus)* Habitat: Ample big game populations, security from human activities	X					
Harlequin duck *(Histrionicus histrionicus)* Habitat: White-water streams, boulder and cobble substrates	X					
Northern bog lemming *(Synaptomys borealis)* Habitat: Sphagnum meadows, bogs, fens with thick moss mats	X					
Mountain plover (*Charadrius montanus*) Habitat: short-grass prairie, alkaline flats, prairie dog towns	X					
Peregrine falcon *(Falco peregrinus)* Habitat: Cliff features near open foraging areas and/or	X					

wetlands						
Pileated woodpecker *(Dryocopus pileatus)* Habitat: Late-successional ponderosa pine and larch-fir forest	X					
Townsend's big-eared bat *(Plecotus townsendii)* Habitat: Caves, caverns, old mines	X					
Montana Arctic Grayling (*Thymallus arctucus montanus*) Habitat: clean cold water, streams, rivers, lakes	X					
Westslope Cutthroat Trout (*Oncorhynchus clarki lewisi*) Habitat: clean cold water, streams, rivers, lakes	X					
Columbia Redband Trout (*Oncorhynchus mykiss gairdneri*) Habitat: clean cold water, streams, rivers	X					
Wolverine *(Gulo gulo)* Habitat: Alpine tundra and high-elevation boreal and coniferous forests that maintain deep persistent snow into late spring		X				Wolverines preferred habitat is boreal forests and alpine habitats. This tract occurs on the ecotone between prairie and timber.
Big Game Species						
Elk		X				See comments below
Whitetail		X				Deer would be temporarily displace by construction but receive only minor impacts over the longer term
Mule Deer		X				Same impacts as whitetail

Comments:

- Two existing open roads limit the usefulness of the project area for big game.
- The project area is included in an active grazing lease, likely limiting the availability of forage for elk and deer.
- Proposed activities on DNRC-managed lands would be of short-duration and would occur during a time period when big game would not likely be using the project area.

- Proposed activities could disturb up to 4 acres, including roughly 2 acres of grassland; overall negligible reductions in big game forage availability could occur.
- Proposed fence construction could displace big game, but would be at a small scale and would not appreciably affect movements at the landscape scale. Recent research has indicated that elk can acclimate to more suburban environments and the proposed modifications on DNRC-managed lands would likely not displace elk in the long term.

Air Quality	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Smoke	X					No burning is anticipated
Dust			X			The dust created by 3 acres or less of disturbed ground would produce a major air quality problem. However the dust will be short term and localized resulting in minor impacts.

Will the proposed action result in potential impacts to:	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Historical or Archaeological sites	X					
Aesthetics			X		Yes	Revegetation of the site to grasses
Demands on Environmental Resources of Land, Water or Energy			X			The project would result in a positive impact by contributing to the improvement of the existing water treatment facility.

Comments:

- There would be an impact to the view-shed by the disturbance created by the portion of this project which is located on Trust Lands.
- A class III level intensity cultural resource inventory was conducted by DNRC's staff archeologist. No cultural or paleontological resources were identified.

Mitigations:

- Aesthetics impacts would be mitigated by revegetation of the disturbed ground to a grass cover.
- If any Historical or Archaeological sites were discovered during operations. Work would cease and the DNRC archaeologist would be notified immediately.

OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: *List other studies, plans or projects on this tract. Determine cumulative impacts likely to occur as a result of current private, state or federal actions in the analysis area, and from future proposed state actions in the analysis area that are under MEPA review (scoped) or permitting review by any state agency.*

- Butte Silver Bow master plan

Impacts on the Human Population

Evaluation of the impacts on the proposed action including **primary, secondary and cumulative** impacts on the Human Population.

Will the proposed action result in potential impacts to:	IMPACT				Can Impact be mitigated?	Comment Index
	N/A	Negligible	Minor	High		
Health and Human Safety				X		A positive impact would be produced by the improved quality and reliability of the new water treatment plant
Industrial, Commercial and Agricultural Activities and Production	X					
Quantity and Distribution of Employment			X			There would be a positive impact from the short term employment provided by the work to be done on State land
Local Tax Base and Tax Revenues	X					
Demand for Government Services	X					The new plant would allow Butte Silver Bow to provide better services for water user in the city and part of the county
Access To and Quality of Recreational and Wilderness Activities	X					
Density and Distribution of population and housing	X					
Social Structures and Mores	X					
Cultural Uniqueness and Diversity	X					

Locally Adopted Environmental Plans and Goals: *List State, County, City, USFS, BLM, Tribal, and other zoning or management plans, and identify how they would affect this project.*

- Butte Silver Bow operates under a county wide master plan

Other Appropriate Social and Economic Circumstances:
Costs, revenues and estimates of return are estimates intended for relative comparison of alternatives. They are not intended to be used as absolute estimates of return.

No Action: The No Action alternative would not generate any return to the trust at this time.

Action: Granting a permanent easement would generate approximately $6,000 in revenues to the Trust. Costs, revenues, and estimates of return are estimates intended for relative comparison of alternatives, they are not intended to be used as absolute estimates of return.

Does the proposed action involve potential risks or adverse effects that are uncertain but extremely harmful if they were to occur?

No

Does the proposed action have impacts that are individually minor, but cumulatively significant or potentially significant?

No

Environmental Assessment Checklist Prepared By:

Name: Fred E. Staedler Jr.
Title: Anaconda Unit Manager
Date: 2-25-14

Finding

Alternative Selected

Action

Significance of Potential Impacts

No significant impacts are anticipated with the implementation of the mitigation measures as identified in this document.

Need for Further Environmental Analysis

[ ]	EIS	[ ]	More Detailed EA	[X]	No Further Analysis

Environmental Assessment Checklist Approved By:

Name: Dana Boruch

Title: Right of Way Specialist Southwest Land Office

Date: 3-20-14

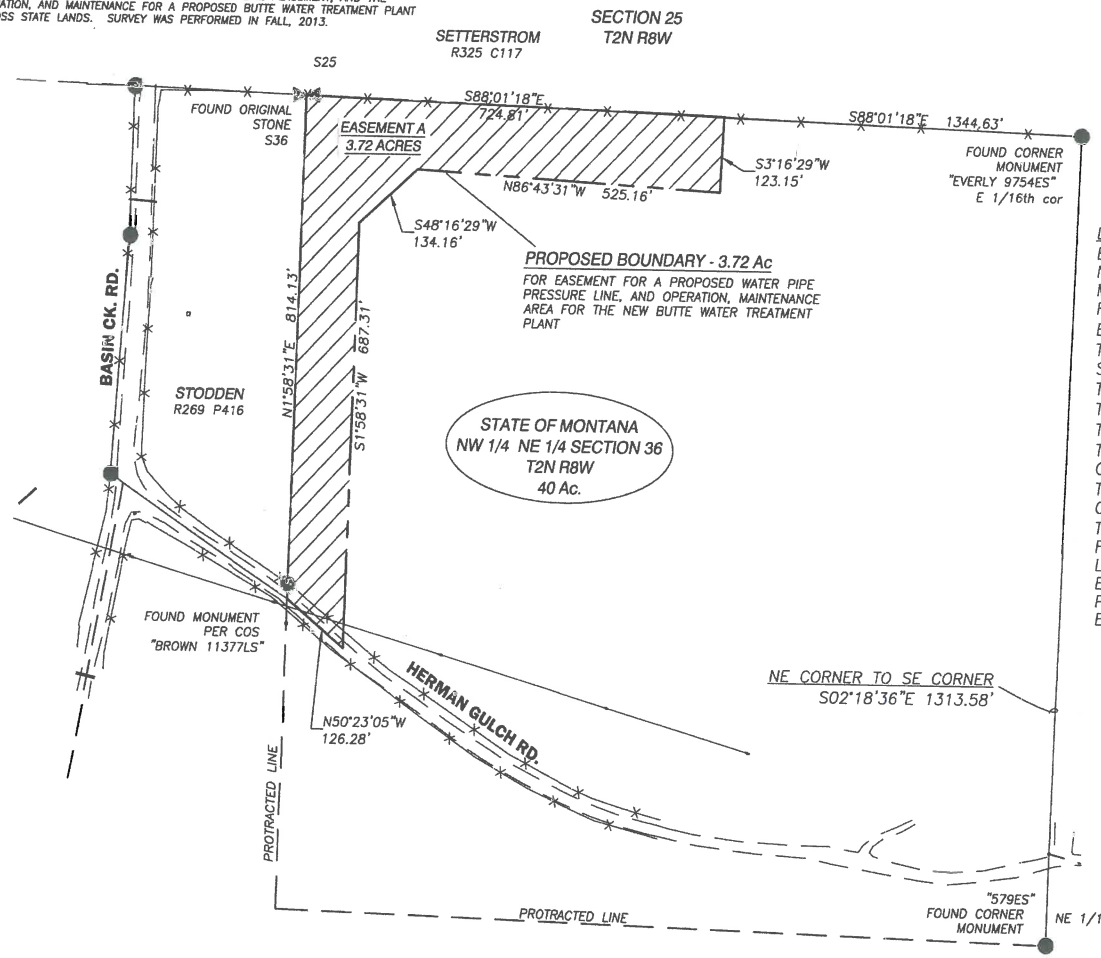
Signature: /s/ Dana M. Boruch

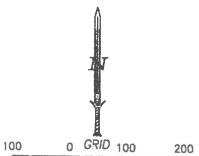
Appendix A - Exhibit

DNRC EASEMENT EXHIBIT A

LOCATED IN NE 1/4 SECTION 36 T2N R8W, P.M.,M.
BUTTE SILVER BOW CITY–COUNTY, MONTANA

THE PURPOSE OF THIS EXHIBIT IS TO SHOW THE EXTERIOR BOUNDARIES OF A PROPOSED EASEMENT AREA FOR PIPE PRESSURE LINE PLACEMENT, AND THE OPERATION, AND MAINTENANCE FOR A PROPOSED BUTTE WATER TREATMENT PLANT ACROSS STATE LANDS. SURVEY WAS PERFORMED IN FALL, 2013.





BASIS OF BEARINGS
GPS SURVEY – GRID NORTH
Ø=-2°12'13"

LEGAL DESCRIPTION – EASEMENT A

BEING PART OF THE NW 1/4 NE 1/4 SECTION 36, TOWNSHIP 2 NORTH RANGE 8 WEST, P.M.,M. OWNED BY THE STATE OF MONTANA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH 1/4 CORNER OF SAID SECTION 36;
THENCE SOUTH 88°01'18" EAST ALONG THE NORTH LINE OF SAID SECTION 724.81 FEET;
THENCE SOUTH 3°16'29" WEST 123.15 FEET;
THENCE NORTH 86°43'31" WEST 525.16 FEET;
THENCE SOUTH 48°16'29" WEST 134.16 FEET;
THENCE SOUTH 01°58'31" WEST 687.31 FEET TO THE APPARENT CENTERLINE OF HERMAN GULCH ROAD;
THENCE NORTH 50°23'05" WEST 126.28 FEET TO THE EAST LINE OF THE STODDEN PROPERTY DESCRIBED IN ROLL 269 PAGE 416;
THENCE NORTH 01°58'31" EAST ALONG SAID EAST LINE 814.13 FEET TO THE POINT OF BEGINNING CONTAINING 3.72 ACRES OF LAND, MORE OR LESS, ALL AS SHOWN ON THE ATTACHED EXHIBIT WHICH IS HEREWITH INCORPORATED IN AND MADE A PART OF THIS LEGAL DESCRIPTION AND IS SUBJECT TO ALL EASEMENTS AND RIGHTS OF WAY PERTINENT TO THIS TRACT.

LEGEND:

- EDGE ROAD
- FOUND STONE MONUMENT, OR AS NOTED
- FOUND/SET PLSS CORNER AS NOTED
- EXISTING FENCELINE
- EXISTING OVERHEAD POWER LINES

CERTIFICATE OF PROFESSIONAL LAND SURVEYOR:

I, THOMAS E. STARK, A REGISTERED LAND SURVEYOR IN THE STATE OF MONTANA DO HEREBY CERTIFY THAT I HAVE PERFORMED THE SURVEY AS SHOWN ON THE ATTACHED CERTIFICATE OF SURVEY, DURING SEPTEMBER 2013 AND THAT THE MONUMENTS, EITHER FOUND OR SET, ARE AS SHOWN. ALSO, THE ABOVE SURVEY IS EXCEEDS THE 5 METER ACCURACY REQUIREMENT BY THE DNRC.

THOMAS E. STARK — 1-30-14 DATE
MONTANA REG. NO. 12249LS

RPA
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RPA

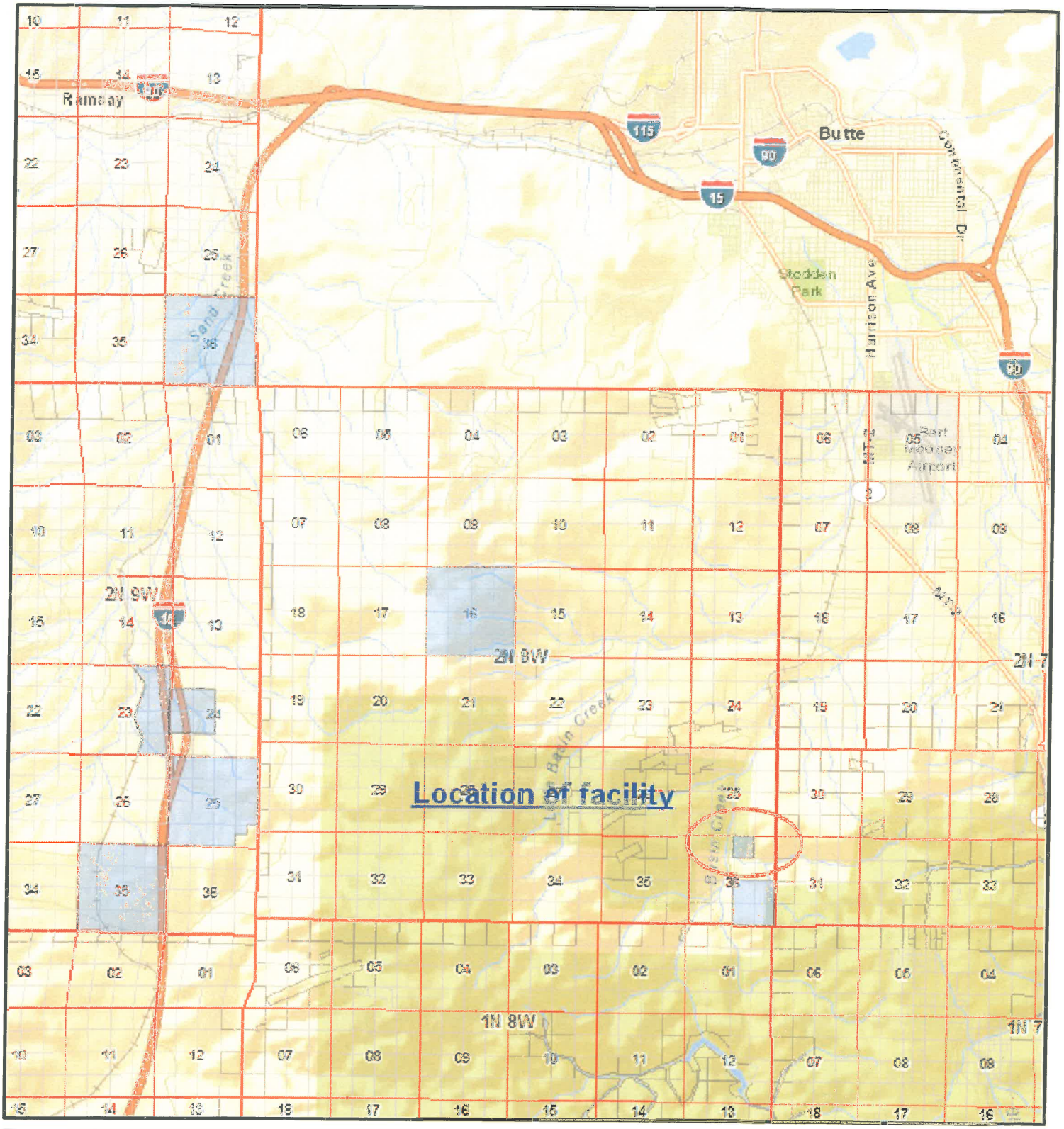
REVISION	BY	APPR.	DATE

DESIGNED BY
DRAWN BY T. STARK, PLS
CHECKED BY
DATE 01/14
PROJECT NO.
FILE ButteWater-Survey

PROJECT TITLE
BUTTE WATER TREATMENT PLANT
Butte, Montana

SHEET TITLE
EASEMENT EXHIBIT A

SHEET
1
1 OF 1



Vicinity map

Basin Water Treatment Facility

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